



## GRAIN TRANSPORTATION REPORT

Agricultural Marketing Service  
United States Department of Agriculture



FEBRUARY 5, 2002

**Containerized Movements of Identity Preserved Grain.** Since 1966, container shipping has become a common way to move all types of products, especially high-value cargo. Due to increased costs and lower rates, customer demand and increasingly cost-efficient processes, the use of containers for seaborne cargo has seen a steady increase. Agriculture exports parallel the trend. As specialty grain markets continue to emerge, containerized shipping should also grow. Intermodal transportation models include on-farm trucks and trailers, commercial trucking, rail and ship, all using containers.

As consumer tastes become more sophisticated, processing plants more automated and technology producing characteristics that need to be preserved for different uses and users, shippers find it imperative to preserve grain identity from farm to consumer. Products cannot be contaminated from other cultivars.

- Bulk shipping could require handling of products three or four times. Containerized shipping enhances IP because containers can be loaded and unloaded anywhere truck or rail has access, and sealed until reaching the destination.
- Customers who want just-in-time delivery are better served because a shipment of grain can be harvested and stored in a container, shipped immediately upon purchase and arrive at the destination in as little as three weeks. The bulk system is much more time intensive.
- Containerized grain movements of specialty grains is a way to diversify markets in order to increase profits.
- Vessels being constructed can carry as many as 6,000 TEUs (twenty-foot equivalent units equal to one 20-foot container). A 6,000 TEU ship is equivalent to the number of containers in 15 double stack container trains. As vessel space improves, the number of available slots for a given trade lane on a given day also increases. Ocean freight rates continue to decrease.
- The initial producer may choose to out-source the logistical management to a freight forwarder who knows foreign import requirements, export documentation, various shipping methods and finding the lowest rates for an export shipment. Many agricultural exporters already take advantage of these services.
- Pooling cargo in a shippers' association uses volume-based service contracts and reduces cost.

Producers can attain higher profits from containerized movements of IP grain by reducing inventory holds, decreasing transit times, marketing directly to the importer and by charging premiums for a higher-quality, better-handled product.

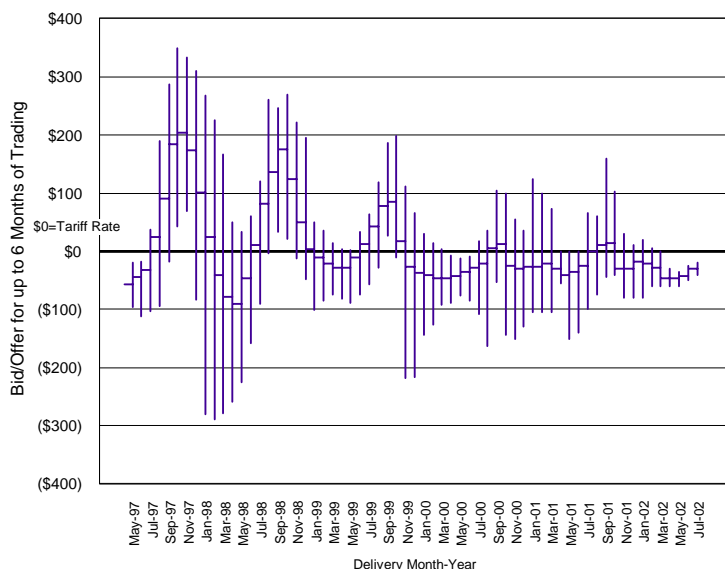
Containerization may also provide a way for grained producers to even out seasonal fluctuations by storing containers directly on the farm or at a nearby facility. While the actual price of shipping by container may be higher than traditional bulk systems, the logistics process of containerized shipping offer ways to reduce costs by using many services available to shippers.

Collectively, this means identity preservation and containerized shipping can meet the interest of producers who want to diversify or specialize, sophisticated customer demands and refined consumer expectations. The technological advancements in communication, production, processing and marketing have, along with low "commodity" grain prices, encouraged IP marketing, too.

*For more information, read "Identity-Preserved Grain: A Logistical Overview" at [www.ams.usda.gov/tmd/ipgrain](http://www.ams.usda.gov/tmd/ipgrain). On February 26, 2002, in cooperation with the South Dakota Wheat Commission, USDA is also conducting a seminar on the logistics of shipping grain via container. For details, go to: [http://www.ams.usda.gov/tmd/SD\\_grainseminar.htm](http://www.ams.usda.gov/tmd/SD_grainseminar.htm) or contact Randy Englund, SD Wheat Commission, at: (605) 773-4645.*

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**Rail Car 'Auction' Offerings**

| Delivery for:   | Mar-02         |               | Apr-02         |               |
|-----------------|----------------|---------------|----------------|---------------|
|                 | <u>Offered</u> | <u>% Sold</u> | <u>Offered</u> | <u>% Sold</u> |
| <b>BNSF-COT</b> | 12,234         | 14%           | 12,966         | 4%            |
| <b>UP-GCAS</b>  | 5,400          | 10%           | 5,400          | 0%            |

Source: Transportation & Marketing /AMS/USDA; www.bnsf.com; www.uprr.com

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

|         | <b>Delivery Period</b> |        |        |        |
|---------|------------------------|--------|--------|--------|
|         | Feb-02                 | Mar-02 | Apr-02 | May-02 |
| BNSF-GF | \$(14)                 | \$(14) | \$(39) | \$(39) |
| UP-Pool | \$(14)                 | \$(16) | \$(41) | \$(41) |

Source: T&M/AMS/USDA. Data from Atwood/ConAgra., Harvest States Co-op, James B. Joiner Co., Tradewest Brokerage Co.;  
GF=Guaranteed Freight, GEEP=Guaranteed Eqpt. Exchange, Pool=Guaranteed Pool

note... bids listed are market INDICATORS only & are NOT guaranteed prices, missing value=No Bid Quoted

**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

| Delivery for: | Mar-02 | Apr-02 | May-02 |
|---------------|--------|--------|--------|
| COT/N. Grain  | no bid | no bid | no bid |
| COT/S. Grain  | \$0    | \$0    | \$0    |
| GCAS/Region 2 | no bid | no bid | no bid |
| GCAS/Region 4 | no bid | no bid | no bid |

Source: T&M/AMS/USDA. Data from [www.bnsf.com](http://www.bnsf.com), [www.uprr.com](http://www.uprr.com),  
(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

**Southbound Barge Freight Nominal/Cash Basis Values**

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

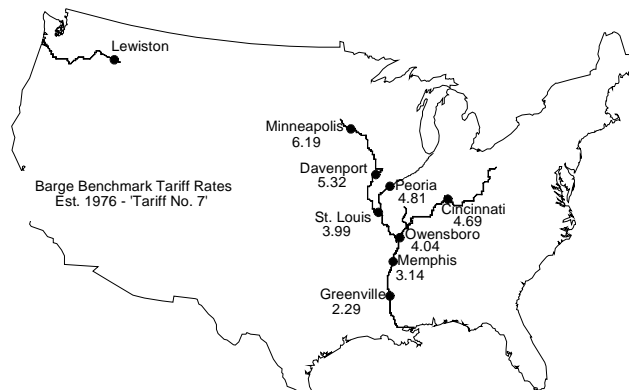
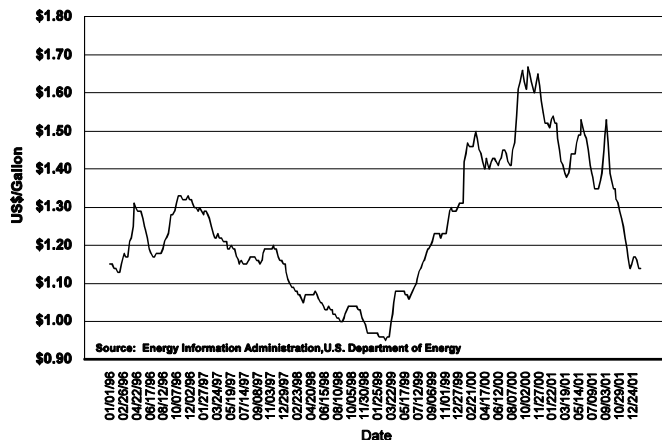
| Week ended | River/Region   | Contract Period | Rate    |      |
|------------|----------------|-----------------|---------|------|
|            |                |                 | Futures | Cash |
| 02/04/02   | St. Louis      | Jan             | 0       | 0    |
|            |                | Mar             | 128     | 135  |
|            |                | May             | 136     | 135  |
|            |                | Jul             | 0       | 135  |
|            |                | Sept            | 0       | 0    |
|            | Illinois River | Jan             | 0       | 0    |
|            |                | Mar             | 170     | 163  |
|            |                | May             | 0       | 160  |
|            |                | Jul             | 0       | 168  |
|            |                | Sept            | 0       | 0    |

Source: St. Louis Merchants Exchange

**Southbound Barge Freight Spot Rates**

|                 | 1/30/02 | 1/23/02 | Feb '02 | Apr '02 |
|-----------------|---------|---------|---------|---------|
| Twin Cities     | 0       | 0       | 0       | 198     |
| Mid-Mississippi | 0       | 0       | 0       | 169     |
| Illinois River  | 153     | 158     | 157     | 161     |
| St. Louis       | 128     | 138     | 127     | 132     |
| Lower Ohio      | 132     | 140     | 131     | 135     |
| Cairo-Memphis   | 122     | 126     | 121     | 124     |

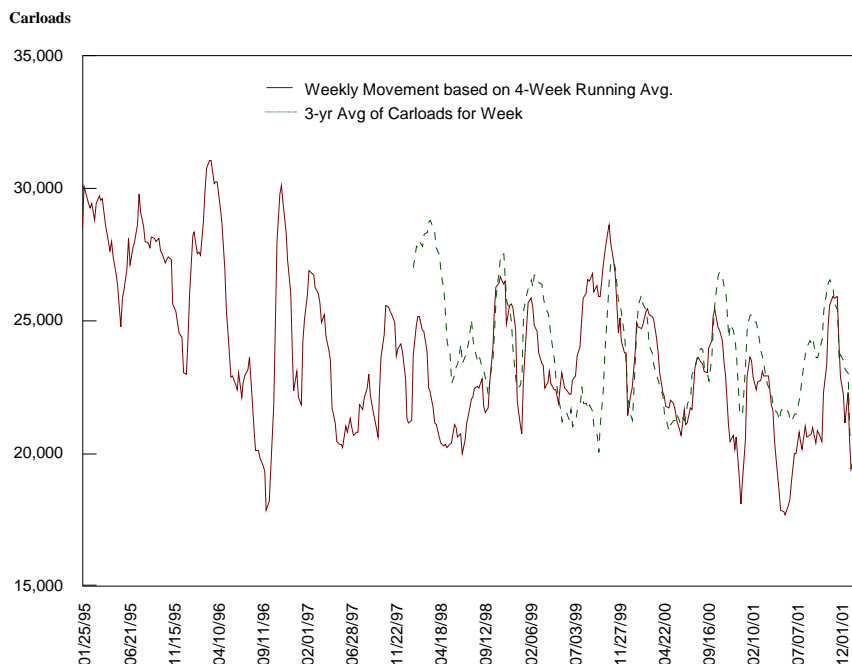
Source: Transportation & Marketing /AMS/USDA  
nq=no quote;

**Weekly Retail Diesel (Road) Prices (Including Taxes)**

## Grain Car Loadings for Class I Railroads

| Class I Railroad Grain Car Loadings |           |
|-------------------------------------|-----------|
| Week Ending:                        | Carloads  |
| 1/12/02                             | 23,967    |
| 01/19/02                            | 24,184    |
| 01/26/02                            | 23,811    |
| Year to Date - 2002                 | 90,201    |
| Year to Date - 2001                 | 91,373    |
| Total 2001                          | 1,117,601 |
| Total 2000                          | 1,188,917 |

Source: Association of American Railroads



## Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated

| Train Carloads Originated |         |         |        |         |         |        |         |         |         |
|---------------------------|---------|---------|--------|---------|---------|--------|---------|---------|---------|
|                           |         |         | East   |         | West    |        |         | Canada  |         |
|                           | Conrail | CSXT    | IC     | NS      | BNSF    | KCS    | UP      | CN      | CP      |
| 01/26/02                  | 0       | 3,291   | 0      | 3,914   | 9,185   | 848    | 6,573   | 4,137   | 4,175   |
| This Week Last Year       | 0       | 3,572   | 0      | 3,029   | 10,074  | 688    | 6,998   | 4,740   | 5,820   |
| 2002 YTD                  | 0       | 12,895  | 0      | 12,546  | 34,585  | 2,931  | 27,244  | 16,755  | 15,525  |
| 2001 YTD                  | 0       | 13,505  | 0      | 13,032  | 35,840  | 1,988  | 27,008  | 18,593  | 20,007  |
| 2001 Total                | 0       | 151,864 | 0      | 163,018 | 428,603 | 26,330 | 347,156 | 254,982 | 232,461 |
| 2000 Total                | 0       | 147,708 | 70,155 | 153,905 | 425,849 | 26,515 | 364,785 | 160,749 | 239,670 |

Source: Association of American Railroads

## Tariff Rail Rates for Unit Train Shipments

January 2002

| Date Effective | Tariff Item | Commodity | Origin          | Destination  | Rate Per Car | Rate Per MT | Rate/Per Bushel* |
|----------------|-------------|-----------|-----------------|--------------|--------------|-------------|------------------|
| 02/04/02       | 45560       | Wheat     | Minneapolis, MN | Houston, TX  | \$2,050      | \$22.60     | \$0.62           |
| 02/04/02       | 43521       | Wheat     | Minneapolis, MN | Portland, OR | \$3,877      | \$42.74     | \$1.16           |
| 02/04/02       | 46540       | Wheat     | Kansas City, MO | Houston, TX  | \$1,650      | \$18.19     | \$0.50           |
| 02/04/02       | 43586       | Wheat     | Kansas City, MO | Portland, OR | \$4,347      | \$47.92     | \$1.30           |
| 02/04/02       | 43581       | Wheat     | Omaha, NE       | Portland, OR | \$4,005      | \$44.15     | \$1.20           |
| 02/04/02       | 31040       | Corn      | Minneapolis, MN | Portland, OR | NA           | \$0.00      | \$0.00           |
| 02/04/02       | 31035       | Corn      | Kansas City, MO | Portland, OR | \$2,700      | \$29.76     | \$0.76           |
| 02/04/02       | 31040       | Corn      | Omaha, NE       | Portland, OR | NA           | \$0.00      | \$0.00           |
| 02/04/02       | 61180       | Soybean   | Minneapolis, MN | Portland, OR | NA           | \$0.00      | \$0.00           |
| 02/04/02       | 61180       | Soybean   | Omaha, NE       | Portland, OR | NA           | \$0.00      | \$0.00           |
| 05/01/98       | 61180       | Soybean   | Omaha, NE       | Portland, OR | \$2,780      | \$25.23     | \$0.83           |

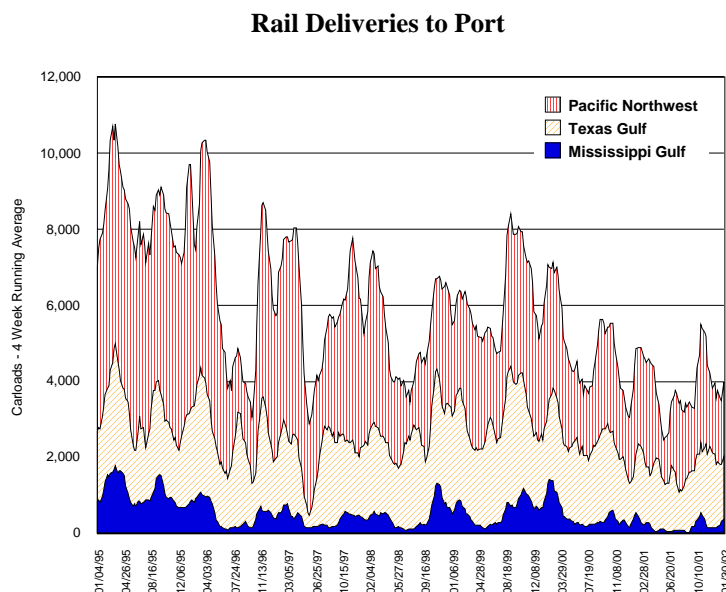
Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat &amp; Soybeans 60 lbs/bu

**Rail Deliveries to Port****Carloads**

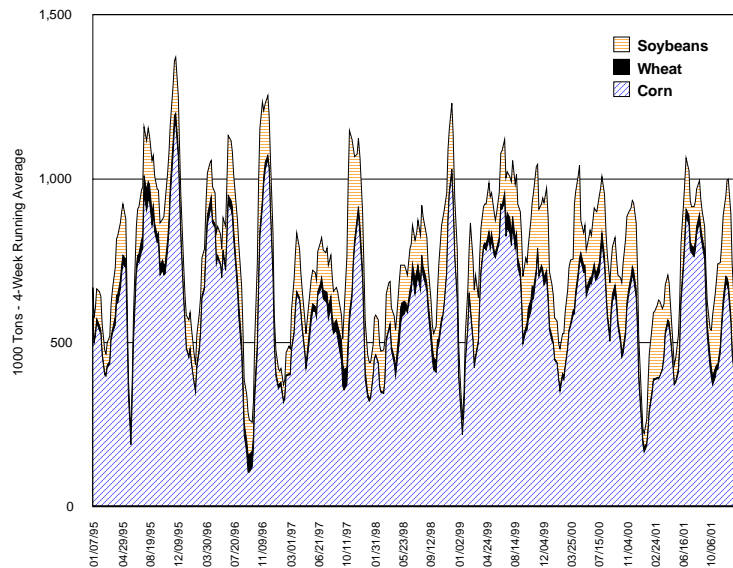
|              | Mississippi Gulf | Texas Gulf | Pacific Northwest | Atlantic & East Gulf |
|--------------|------------------|------------|-------------------|----------------------|
| Week Ending: |                  |            |                   |                      |
| 12/26/01     | 59*              | 1,448      | 2,309             | 586                  |
| 01/02/02     | 250*             | 1,263      | 1,137             | 717                  |
| 01/09/02     | 195*             | 2,289      | 2,029             | 966                  |
| 01/16/02     | 402*             | 1,357*     | 1,472             | 1,307                |
| 01/23/02     | 382*             | 1,118*     | 2,110             | 965                  |
| 01/30/02     | 524*             | 1,841*     | 2,291             | 873                  |
| YTD 2002     | 1,503*           | 6,605*     | 7,902             | 4,111                |
| YTD 2001     | 1,508            | 4,466      | 9,161             | 2,869                |
| Total 2000   | 25,675           | 105,308    | 129,464           | 14,816               |
| Total 1999   | 30,038           | 132,069    | 161,492           | 14,446               |

Source: Transportation &amp; Marketing/AMS/USDA



(\*) Incomplete Data

(\*\*) Revised Data

**Barge Movements - Locks 27****Barge Grain Movements**

for week ending 1/26/02

|                        | Corn       | Wht   | Sybn   | Total  |
|------------------------|------------|-------|--------|--------|
|                        | 1,000 Tons |       |        |        |
| Mississippi River      |            |       |        |        |
| Rock Island, IL (L15)  | 0          | 0     | 0      | 0      |
| Winfield, MO (L25)     | 0          | 0     | 0      | 0      |
| Alton, IL (L26)        | 440        | 6     | 208    | 659    |
| Granite City, IL (L27) | 433        | 6     | 216    | 660    |
| Illinois River (L8)    | 336        | 7     | 162    | 510    |
| Ohio (L52)             | 216        | 14    | 107    | 369    |
| Arkansas (L1)          | 0          | 22    | 10     | 33     |
| 2002 YTD               | 2,162      | 141   | 1,021  | 3,478  |
| 2001 YTD               | 1,539      | 176   | 565    | 2,466  |
| Total 2001             | 31,878     | 2,679 | 10,616 | 47,091 |
| Total 2000             | 33,482     | 2,518 | 10,327 | 48,247 |

Miss YTD: Calendar year totals include Miss/27, Ohio/52 and Ark/1.

Source: U.S. Army Corp of Engineers; L15 &amp; L25 closed for winter.

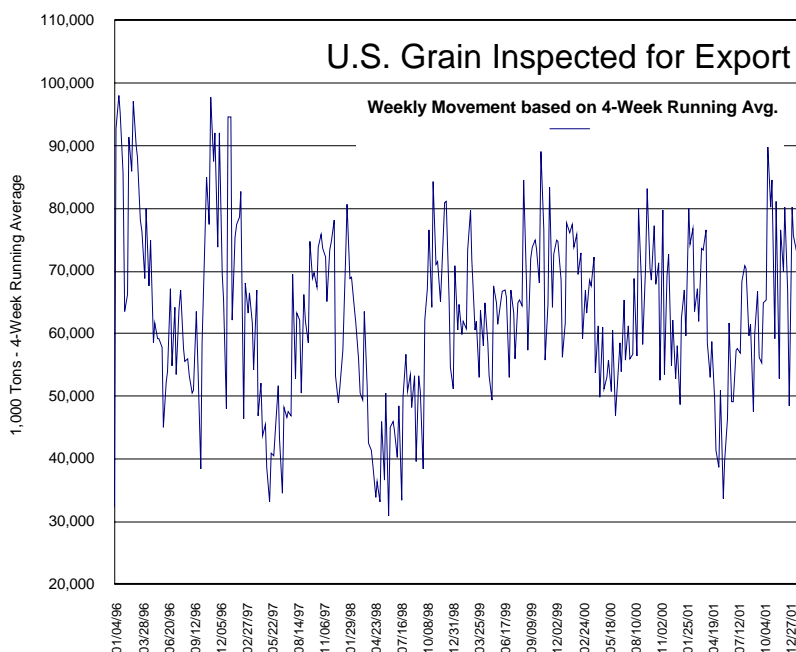
**U.S. Export Balances** (1,000 Metric Tons)

|                                     | <i>HRW</i> | <i>SRW</i> | <i>HRS</i> | Wheat<br><i>SWW</i> | <i>DUR</i> | <i>All</i> | Corn   | Soybean | Total  |
|-------------------------------------|------------|------------|------------|---------------------|------------|------------|--------|---------|--------|
| <u>Unshipped Exports-Crop Year</u>  |            |            |            |                     |            |            |        |         |        |
| 01/24/02                            | 1,407      | 678        | 974        | 505                 | 182        | 3,746      | 7,657  | 7,641   | 19,044 |
| This Week Year Ago                  | 1,107      | 454        | 973        | 981                 | 140        | 3,654      | 7,071  | 6,446   | 17,171 |
| <u>Cumulative Exports-Crop Year</u> |            |            |            |                     |            |            |        |         |        |
| 00/01 YTD                           | 5,543      | 3,731      | 3,636      | 2,212               | 812        | 15,932     | 16,841 | 16,026  | 48,799 |
| 99/00 YTD                           | 6,332      | 3,030      | 3,642      | 3,324               | 807        | 17,133     | 18,382 | 17,713  | 53,228 |
| 97/98 Total                         | 9,858      | 4,710      | 6,305      | 5,413               | 1,232      | 27,518     | 37,220 | 24,516  | 89,254 |
| 96/97 Total                         | 7,387      | 3,645      | 7,864      | 6,105               | 963        | 25,965     | 44,476 | 24,501  | 94,942 |

Source: Foreign Agricultural Service YTD-Year-to-Date ([www.fas.usda.gov](http://www.fas.usda.gov)) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31**Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons**

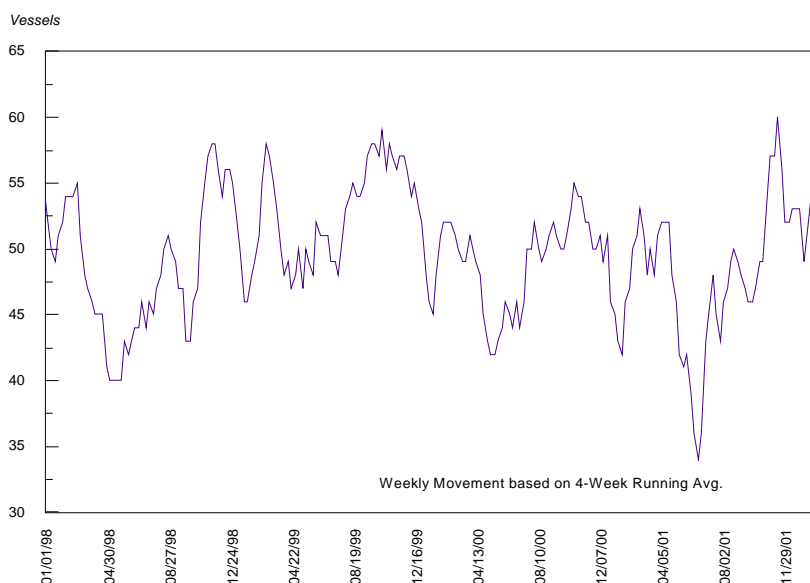
|                | <u>Pacific Region</u> |             |                | <u>Mississippi Gulf</u> |             |                | <u>Texas Gulf</u> |             |                |
|----------------|-----------------------|-------------|----------------|-------------------------|-------------|----------------|-------------------|-------------|----------------|
|                | <i>Wheat</i>          | <i>Corn</i> | <i>Soybean</i> | <i>Wheat</i>            | <i>Corn</i> | <i>Soybean</i> | <i>Wheat</i>      | <i>Corn</i> | <i>Soybean</i> |
| 01/31/02       | 187                   | 129         | 42             | 106                     | 621         | 789            | 81                | 0           | 56             |
| 2001 YTD       | 823                   | 405         | 90             | 327                     | 2,566       | 3,037          | 444               | 0           | 403            |
| 2000 YTD       | 687                   | 465         | 227            | 403                     | 2,392       | 1,628          | 325               | 20          | 113            |
| % of Last Year | 8%                    | 7%          | 5%             | 5%                      | 7%          | 17%            | 6%                | 0%          | 40%            |
| 1998 Total     | 10,838                | 4,373       | 651            | 5,048                   | 31,330      | 14,917         | 7,270             | 562         | 1,392          |

Source: Federal Grain Inspection Service YTD-Year-to-Date

**Select Canadian Ports - Export Inspections**  
1,000 Metric Tons, Crop Year

|                      | <u>Wheat</u> | <u>Durum</u> | <u>Barley</u> |
|----------------------|--------------|--------------|---------------|
| Week Ended: 01/31/02 |              |              |               |
| Vancouver            | 3,613        | 220          | 323           |
| Prince Rupert        | 562          | 0            | 0             |
| Prairie Direct       | 782          | 257          | 146           |
| Thunder Bay          | 294          | 191          | 45            |
| St. Lawrence         | 1,491        | 904          | 26            |
| 2001 YTD Exports     | 6,742        | 1,572        | 540           |
| 2000 YTD Exports     | 6,221        | 1,679        | 843           |
| % of Last Year       | 108%         | 94%          | 64%           |

Source: Canadian Grains Commission, Crop year 8/1-7/31



**Gulf Region  
Vessels Loaded  
- Past 7 Days-**

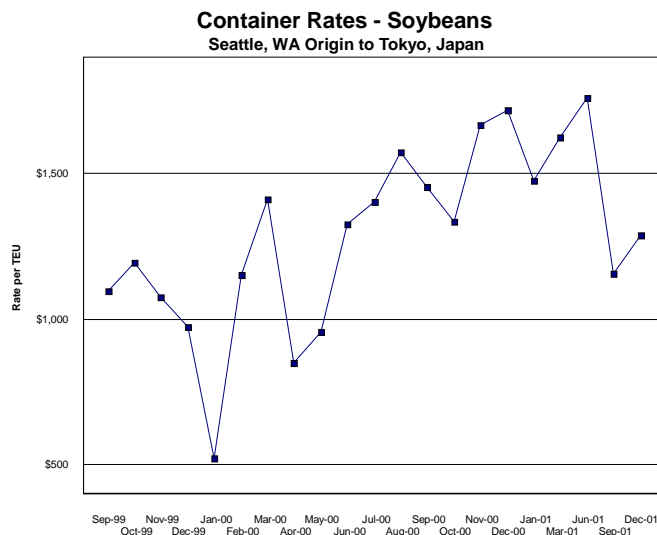
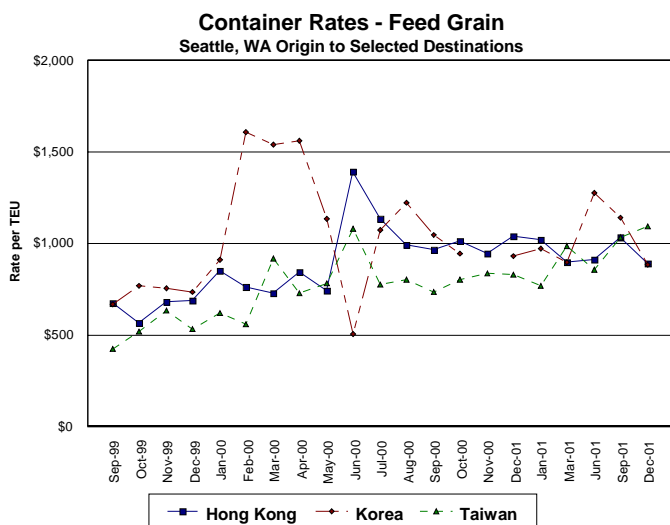
### Port Region Ocean Grain Vessels

|            | Gulf           |                          |                             | Pacific Northwest |                          |                             | Vancouver, B.C. |                          |                             |
|------------|----------------|--------------------------|-----------------------------|-------------------|--------------------------|-----------------------------|-----------------|--------------------------|-----------------------------|
|            | <u>In Port</u> | <u>Loaded<br/>7-Days</u> | <u>Due Next<br/>10-Days</u> | <u>In Port</u>    | <u>Loaded<br/>7-Days</u> | <u>Due Next<br/>10-Days</u> | <u>In Port</u>  | <u>Loaded<br/>7-Days</u> | <u>Due Next<br/>10-Days</u> |
| 01/24/02   | 38             | 62                       | 81                          | 8                 |                          |                             | 4               | 7                        | 3                           |
| 01/31/02   | 39             | 54                       | 80                          | 12                |                          |                             | 6               | 6                        | 6                           |
| 1999 Range | (14..47)       | (39..65)                 | (34..80)                    | (6..18)           |                          |                             | (2..20)         | (2..15)                  | (0..9)                      |
| 1998 Range | (19..62)       | (34..64)                 | (40..93)                    |                   |                          |                             | (1..19)         | (3..14)                  | (0..10)                     |
| 1999 Avg   | 32             | 52                       | 65                          |                   |                          |                             | 9               | 9                        | 3                           |
| 1998 Avg   | 40             | 48                       | 61                          |                   |                          |                             | 10              | 9                        | 3                           |
| 1997 Avg   | 33             | 45                       | 58                          |                   |                          |                             |                 |                          |                             |

Source: Transportation & Marketing /AMS/ USDA

### Container Ocean Freight Rates

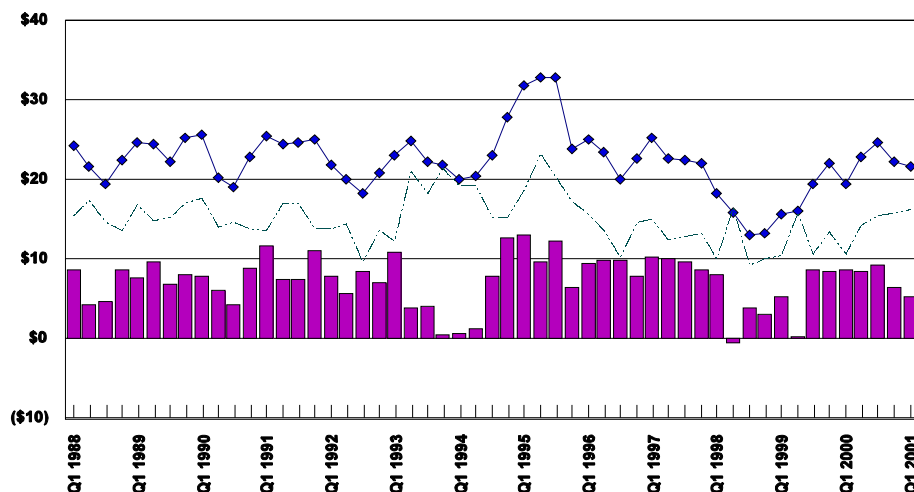
Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share



Source: Transportation & Marketing/AMS/USDA

◆ Rate - Gulf to Japan  
 --- Rate - PNW to Japan  
 ■ Spread - Gulf vs. PNW to Japan

US\$/Metric Ton



Quarterly Ocean  
Freight Rates

### Quarterly Ocean Freight Rates

Average Rates & Percentage Changes, U.S. Dollars/Metric Ton - Basis

|                | 2001<br>4 <sup>th</sup> Qtr | 2000<br>4 <sup>th</sup> Qtr | %<br>Change |                      | 2001<br>4 <sup>th</sup> Qtr | 2000<br>4 <sup>th</sup> Qtr | %<br>Change |
|----------------|-----------------------------|-----------------------------|-------------|----------------------|-----------------------------|-----------------------------|-------------|
| <b>Gulf to</b> |                             |                             |             | <b>Pacific NW to</b> |                             |                             |             |
| Japan          | \$16.25                     | \$22.38                     | -27%        | Japan                | \$9.64                      | \$15.87                     | -39%        |
| Mexico         |                             | \$13.39                     | -           | Red Sea/ Arabian Sea |                             | \$26.70                     | -           |
| Venezuela      |                             | \$13.29                     | -           | <b>Argentina to</b>  |                             |                             |             |
| N. Europe      | \$11.73                     | \$14.96                     | -22%        | Med. Sea             | \$17.47                     |                             | -           |
| N. Africa      | \$16.98                     | \$22.26                     | -24%        | N. Europe            | \$16.22                     | \$18.97                     | -14%        |
| Med. Sea       | \$10.58                     | \$15.19                     | -30%        | Japan                | \$26.33                     |                             | -           |

Source: Transportation & Marketing/AMS/USDA; (\*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

### Ocean Freight Rates (Select Locations) - week ending 2/2/02

| Export Region | Import Region | Grain       | Month     | Volume Loaded<br>(Tons) | Freight Rate<br>(\$/Ton) |
|---------------|---------------|-------------|-----------|-------------------------|--------------------------|
| Gulf          | Ireland       | Grains      | Jan 29/30 | 30,000                  | \$14.00                  |
| Gulf          | Rotterdam     | Heavy Grain | Feb 11/20 | 55,000                  | \$9.00                   |
| Gulf          | Rotterdam     | Grains      | Jan 29/30 | 55,000                  | \$12.18                  |
| Gulf          | Italy         | Wheat       | Feb 1/10  | 58,150                  | \$11.00                  |
| Gulf (Texas)  | Egypt         | Heavy Grain | Feb 1/10  | 45,000                  | \$10.40                  |
| Gulf          | Egypt         | Heavy Grain | Feb 1/10  | 60,000                  | \$9.65                   |
| River Plate   | Jordan        | Wheat       | Feb 5/20  | 50,000                  | \$18.00                  |
| Turkey        | Morocco       | Barley      | Feb 1/5   | 25,000                  | \$9.00                   |

Source: Maritime Research Inc.; rates shown are for long ton (2,240 lbs.=one long ton), F.O.B., except where otherwise indicated; op=option